

Kent Interdisciplinary Research Centre in Cyber Security (KirCCS)

# **KirCCS** Newsletter

Welcome to the second issue of the KirCCS Newsletter. Every quarter we send out a round up of the latest news, activities and events we think members of KirCCS and external people and organisations will be interested in. If you have any suggestions or feedback, would like to share your news with us, or subscribe to this newsletter, please email <u>cyber-info@kent.ac.uk</u>. We maintain an archive of past issues of this <u>newsletters</u> on our website: <u>cyber.kent.ac.uk</u>.

Future issues of this newsletter will be re-branded as SoCyETAL Newsletter due to the recent establishment of the Institute of Advanced Studies in Cyber Security and Conflict (SoCyETAL, see below for the news).

#### News

#### SoCyETAL & KeCSEC are established

This January, the University of Kent is pleased to announce the establishment of the <u>Institute of Advanced</u> <u>Studies in Cyber Security and Conflict (SoCyETAL)</u>, a University-wide hub promoting interdisciplinary research and educational activities in cyber security.

SoCyETAL will further extend the cyber security research of KirCCS, especially its Socio-Technical Security and Privacy research theme, into wider areas such as international conflict, cyber influence and behaviour, cybercrime, cyber warfare, cyber policy, cyber law, and digital financial technology.

Alongside KirCCS, the new Kent Cyber Security Educational Centre (KeCSEC) has also been established as one of the two pillars of SoCyETAL's activities. It will coordinate University-wide educational activities around cyber security, such as setting up a pool of cyber-related modules across different schools and new cyber-related interdisciplinary degree programmes. SoCyETAL will also support the University's IS Services in several initiatives such as staff awareness on cyber security.

#### SoCyETAL Management Group

Director of SoCyETAL & KirCCS: Prof Shujun Li

Deputy Director of SoCyETAL: Dr Harmonie Toros

Deputy Director of SoCyETAL & Director of KeCSEC: Dr Virginia Franqueira

SoCyETAL now has its own dedicated physical space in Keynes College, hosting the management group, administrative staff, some core academic staff, research staff and PhD students, in order to promote exchanges and collaborations between different Schools participating in SoCyETAL. The physical space includes dedicated labs and a common room, for the use of SoCyETAL staff and students. There are also dedicated rooms for hosting short- and long-term visitors and for small-group meetings.

Professor Shujun Li, Director of SoCyETAL, said: "I am very excited to see the official establishment of the Institute and the appointment of its management team. Building on our past successes in cyber security research and the University of Kent's status as a UK government recognised ACE-CSR (Academic Centre of Excellence in Cyber Security Research), we will continue to grow activities in cyber security research and education to the next level. I look forward to working with Dr Virginia Franqueira and Dr Harmonie Toros, who are appointed the two Deputy Directors of the Institute, all members of the Institute across different Divisions and Schools, and our external collaborators in different sectors to promote interdisciplinary cyber security research and education at the University of Kent and beyond."

# Latest research in biometric security for mobile devices

Kent's School of Engineering and Digital Arts held a free online webinar to reveal the extensive and revolutionary results of their four-year research study, the <u>AMBER</u> <u>Project</u>, on Tuesday 20 October 2020. The AMBER research project (enhAnced Mobile BiomEtRics) was awarded €2.5 million in May 2016, funded through the <u>Horizon 2020</u> programme by the European Union. As a Marie Skłodowska-Curie Innovative Training Network, the project investigated issues facing biometric solutions on mobile devices.

Concluding in December 2020, the collaborative project encompasses five academic partners across Europe and seven corresponding industry partners. A total of ten PhD students have worked on the project which has been organised as a European scientific network.

Led by **Professor Richard Guest**, the project has produced its final conclusions that will help shape and influence the field of mobile biometrics in the future. This includes advancements made in the areas of human interactions with mobile devices, security and privacy.

# Kent cyber security researchers sign open letter to UK charity sector

On the 18<sup>th</sup> November 2020, three researchers from KirCCS, joined other UK researchers in signing an open letter to the UK Charity Sector.

**Dr Virginia Franqueira**, **Professor Shujun Li** and **Professor David Chadwick**, signed the <u>open letter</u> which was written in response to a <u>recent report</u> published by ProPrivacy on the widespread use of programmatic advertising in the charity sector and the potential risks this poses to the privacy of users of charity websites.

The ProPrivacy report reveals that many charities, through their use of such advertising technologies, are potentially putting people's personal data at risk, inadvertently allowing AdTech companies to profile users based on data harvested via ads embedded on web pages they visit.

<u>Read an article</u> on the School of Computing news blog for more details.

# Reflecting on research privacy policy changes in WhatsApp

On 4th January 2021, WhatsApp rolled out updates to their terms of use and privacy policy statements. WhatsApp users were notified that unless they agreed to the new terms, access to their accounts will be revoked from 8th February 2021. The changes have led to concern from privacy experts and users, and has led to a mass migration for many to platforms such as Signal and Telegram. **Dr Sanjay Bhattacherjee** has written a report reflecting on these changes thereby providing a critique of WhatsApp's Updated Terms of Use and Privacy Policy. Read more <u>here</u>.

#### KirCCS produces two animation videos

At KirCCS, we are always looking at new ways to engage the public. An <u>animated video</u> was recently made jointly by KirCCS and Futurum Careers to aspire nextgeneration cyber security experts, with career tips from **Professor Shujun Li** and **Dr Jason Nurse**. It is already being shown to children at local schools and was designed to supplement an <u>article</u>, which includes an <u>activity sheet</u> for teachers and pupils to do some exercises themselves.



A second <u>animated video</u> gives an introduction and overview of KirCCS and the interdisciplinary nature of our work to the wider population, whether this is someone looking to collaborate on our research, work or study with us or needs help with a cyber security related issue.

Interdisciplinary research



Our animated videos are also available on <u>our new</u> <u>YouTube Channel</u>, which hosts additional playlists, including talks of our members and related cyber security awareness videos. We would love for you to visit us and subscribe to our channel!



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### **New Research Projects**

### Dr Harmonie Toros awarded GCHQ Fellowship



**Dr Harmonie Toros**, a Deputy Director of SoCyETAL and Reader in International Conflict Analysis at Kent's School of Politics and International Relations, has been awarded a Research Fellowship for National Resilience with the Government Communications Headquarters (GCHQ).

This research partnership will work to better understand some of the biggest threats to national security – from state influence campaigns to cyber-attacks on smart buildings.

Dr Toros' research within the Fellowship will focus on the Gendered Narrative Analysis on violent extremism. Leading a team of national security academics, computer scientists, and forensic linguists she will explore the stories that are being told about how men and women engage in political violence and how these stories can help recruitment. Over the next sixth months, experts from the intelligence, cyber and security agency will support Dr Toros and five other academics from UK universities to carry out research into areas like counterterrorism and cyber security. The research will add to the intelligence community's existing knowledge to improve understanding and better equip them to tackle some of the biggest national security challenges facing the UK.

The Research Fellowships Programme for National Resilience is part of the GCHQ's efforts to pioneer a new kind of security by harnessing the collective power of academia and industry to provide fresh perspectives on ways to address national security priorities.

Please also see the University of Kent <u>news item</u>, which includes a video from Harmonie giving an introduction to the project.

# Internet use and online safety for people with Intellectual Disabilities (ID)

A group of researchers led by **Dr Paraskevi Triantafyllopoulou** of the <u>Tizard Centre</u> (part of the School of Social Policy, Sociology and Social Research) have been awarded £209,703 from NIHR (National Institute for Health Research) SSCR (School of Social Care Research) to carry out a project looking at internet use and online safety for people with Intellectual Disabilities (ID). Professor Michelle McCarthy, also from the Tizard Centre, and **Professor Shujun Li** of KirCCS, are co-investigators of the project, bringing in their expertise in qualitative analysis and cyber security, respectively.

The project will run for two years (2020- 2022) and look at the benefits and risks of using the internet for people with ID, as well as the barriers they might encounter and opportunities being online offers.

Dr Triantafyllopoulou said: "The timing of this funding was perfect, as online use and safety are immensely important, in a period where everyone is increasingly dependent on the internet to access information about health, social care, shopping and simply connect with each other. People with Intellectual Disabilities are no different. I am grateful to Professors Michelle McCarthy and Shujun Li who have joined forces with me to investigate such an important topic."

#### **New Publications**

### Below are some recently published/accepted research publications of our members:

Ani, Uchenna D., Watson, Jeremy M., Carr, Madeline, Cook, Al, **Nurse, Jason R.C.** (2020) "<u>A</u> <u>Review of the Use and Utility of Industrial Network-Based</u> <u>Open Source Simulators: Functionality, Security, and</u> <u>Policy Viewpoints</u>", in *Journal of Defense Modeling and Simulation.* 

Ani, Uchenna D., Watson, Jeremy M., Green, Benjamin, Craggs, Barnaby, **Nurse, Jason R.C.** (2020) "Design Considerations for Building Credible Security Testbeds: Perspectives from Industrial Control System Use Cases", in Journal of Cyber Security Technology.

Aslan, Çağrı B., **Li, Shujun**, Çelebi, Fatih V., Tian, Hao (2020) "<u>The World of Defacers: Looking through the Lens</u> of Their Activities on Twitter", in *IEEE Access* 8:204132-204143.

Aydin, Kübra, **Belen Sağlam**, **Rahime**, **Li**, **Shujun**, Bulbul, Abdullah (2020) "<u>When GDPR Meets CRAs</u> <u>(Credit Reference Agencies): Looking through the Lens</u> <u>of Twitter</u>", accepted to 13th International Conference on Security of Information and Networks (SINCONF 2020).

Becker, Ingolf, Posner, Rebecca, **Isman**, **Tasmina**, Ekblom, Paul, Borrion, Hervé, McGuire, Michael, Li, **Shujun** (2021) "<u>Privacy in Transport? Exploring</u> <u>Perceptions of Location Privacy Through User</u> <u>Segmentation</u>", in *Proceedings of 54th Hawaii International Conference on System Sciences* (HICSS 2021), pp. 5347-5356.

Bhattacherjee, Sanjay, Sarker, Palash (2021) "<u>Weighted Voting Procedure having a Unique Blocker</u>", in *International Journal of Game Theory*.

Brierley, Calvin, Pont, Jamie, Arief, Budi, Barnes, David J., Hernandez-Castro, Julio C. (2020) "Persistence in Linux-Based IoT Malware", accepted to 25th Nordic Conference on Secure IT Systems (Nordsec 2020).

Chousein, Zeynep, Tetik, Hacı Yakup, **Belen Sağlam**, **Rahime**, Bülbül, Abdullah, **Li**, **Shujun** (2020) "Tension between GDPR and Public Blockchains: A Data-Driven Analysis of Online Discussions", accepted to 13th International Conference on Security of Information and Networks (SINCONF 2020).

Heering, Maria S., **Travaglino**, **Giovanni A.**, Abrams, Dominic, Goldsack, Emily (2020) "<u>'If They Don't Listen to</u> <u>Us, they Deserve It': The Effect of External Efficacy and</u> <u>Anger on the Perceived Legitimacy of Hacking</u>", in *Group Processes and Intergroup Relations*, 23(6):863-881.

Knight, Richard, **Nurse**, **Jason R.C.** (2020) <u>"A</u> <u>Framework for Effective Corporate Communication after</u> <u>Cyber Security Incidents</u>", *Computers & Security* 9:102036.

Mott, Gareth (2020) "<u>United Kingdom: the constructed</u> <u>threat of cyberterrorism</u>", in *Countering cyber terrorism in a time of 'war on words': Kryptonite for the protection of digital rights? Hague Program for Cyber Norms*, pp. 11-15.

Moura, Ralf, Gonzalez, Alexandre, **Franqueira, Virginia N.L.**, Neto, Antonio, Pessin, Gustavo (2020) <u>"A Cyber-Security Strategy for Internationally-dispersed Industrial Networks</u>", in *Proceedings of the 2020 International Conference on Computational Science and Computational Intelligence* (CSCI 2020), IEEE. Pont, Jamie, Arief, Budi, Hernandez-Castro, Julio C. (2020) "Why Current Statistical Approaches to Ransomware Detection Fail", in Information Security: 23rd International Conference, ISC 2020, Bali, Indonesia, December 16–18, 2020, Proceedings, pp. 199-216. Watch now on YouTube.

Stevens, Francesca, Nurse, Jason R.C., Arief, Budi (2020) "Cyber Stalking, Cyber Harassment and Adult Mental Health: A Systematic Review", in Cyberpsychology, Behavior, and Social Networking, DOI:10.1089/cyber.2020.0253.

Wang, Hui, Ho, Anthony T.S., **Li, Shujun** (2020) "<u>OR-</u> <u>Benchmark: An Open and Reconfigurable Digital</u> <u>Watermarking Benchmarking Framework</u>", in *Computer Security: ESORICS 2020 International Workshops, DETIPS, DeSECSys, MPS, and SPOSE*, pp. 243-260.

Yuan, Haiyue, Li, Shujun, Patrice Rusconi (2020) Cognitive Modeling for Automated Human Performance Evaluation at Scale, Springer, ISBN 978-3-030-45704-4

## Framework for effective corporate communications after cyber attacks

Research by **Dr Jason Nurse** and Richard Knight, from the University of Warwick, has contributed to a new, practical framework that will help businesses, cyber security teams and corporate communications professionals respond more effectively to cyber security attacks.

The framework includes a guide for planning ahead of a potential cyber crisis as well as a crisis response plan which takes cyber security, corporate communication and public relations (PR) professionals through a process flow chart. Users of the framework are provided with guidance and considerations on disclosure messaging, when to disclose, who should face the media, and by which channels to best communicate with stakeholders - including the customers and business partners. Furthermore, it guides professionals on how to deal with responses or backlash from stakeholders. It also reminds businesses to prepare for the reality of opportunistic cyber criminals that would attempt to capitalise on the data breach (e.g. through phishing attacks, scams and other cybercrimes).

The research paper titled "<u>A Framework for Effective</u> <u>Corporate Communication after Cyber Security</u> <u>Incidents</u>" is published in *Computers & Security Journal.*  New book on cyber security career path: *Confident Cyber Security* 



**Professor Shujun Li** from the School of Computing and Director of KirCCS, appears in **Dr Jessica Barker**'s <u>best-selling book</u>: <u>Confident Cyber Security</u>.

**Dr Jessica Barker** is a renowned cyber security expert in the human nature of cyber security, Co-Founder and Co-CEO of Cygenta and a member of KirCCS's Advisory Board. The book aims to encourage more people to go for a cyber security career. Professor Shujun Li appears in Chapter 14 "The Future of Cyber Security and What it Means for Your Career" to showcase a cyber security career in academia.

# Research explores when people may legitimise hacking

**Dr Giovanni Travaglino** and Maria Heering from the School of Psychology, have found from their research that when individuals feel that a system or authority is unresponsive to their demands, they are more likely to legitimise hacker activity at an organisation's expense.

Their findings suggest that individuals are more likely to experience anger when they believe that systems or authorities have overlooked pursuing justice on their behalf or listening to their demands. In turn, the study found that if the systems or authorities in question were a victim of hacking, individuals would be more likely to legitimise the hackers' disruptive actions as a way to manifest their own anger against the organisation.

With more organisations at risk to cyber security breaches, and more elements of individuals' social lives taking place online, this research is timely in highlighting how hackers are perceived by individuals seeking justice.

Their research paper "<u>If they don't listen to us, they</u> deserve it': The effect of external efficacy and anger on the perceived legitimacy of hacking" is published in *Group Processes & Intergroup Relations*.

# Cyber security incentives and the role of cyber insurance

A new policy paper co-authored by **Dr Jason Nurse** has outlined the opportunities of and challenges in using cyber insurance to incentivise cyber security practices.

Dr Nurse collaborated with James Sullivan, Head of Cyber Research at the Royal United Services Institute (RUSI), to produce the Emerging Insights paper, providing actionable policy recommendations for those businesses involved in, or considering, cyber insurance. The paper's findings are based on a review of existing industry reports and academic research.

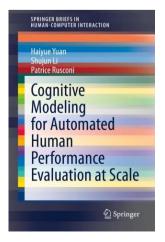
The <u>report</u> titled "Cyber Security Incentives and the Role of Cyber Insurance", forms part of an independent research project by the University of Kent and the RUSI. This derives from a series of interviews and workshops with insurers, businesses, cyber security providers, government and other key stakeholders.

The next stage of Dr Nurse's research involves canvassing views on cyber insurance from businesses/organisations (specifically those that would be in a position to purchase cyber insurance, or that have purchased cyber insurance), via <u>a survey</u>. The results will feature in the project's final report due in March 2021.

# New book on cognitive modelling is published

**Professor Shujun Li**'s co-authored book *Cognitive Modeling for Automated Human Performance Evaluation at Scale* was recently published as part of the *SpringerBriefs in Human-Computer Interaction* book series. In this book, Professor Li and his co-authors provide readers with a systematic overview of state-ofthe-art cognitive modelling software tools and applications, and an introduction to a new software framework for facilitating large-scale modelling and simulation of human-performance tasks.

The book can be accessed here.



#### **KirCCS Team News**

**Joseph Kearney** is a new PhD student studying blockchain security in light of quantum technologies under the supervision of **Dr Carlos Perez-Delgado**.

**Pierre Mondon** is a new PhD student studying malware analysis, with a focus on malware attribution, supervised by **Dr Virginia Franqueira**.

Jack Moyler, another new PhD student, is working on his PhD on post-quantum cryptology. His PhD work is supervised by Dr Sanjay Bhattacherjee and Professor Julio Hernandez-Castro.

Ali Raza recently started a dual PhD study between the University of Lille in France and the University of Kent. His PhD is on smart healthcare with federated learning and data privacy. He is co-supervised by **Professor Shujun Li** at Kent, and Dr Kim Phuc Tran and Professor Ludovic Koehl of the University of Lille.

**Paula Delgado de Santos** and **Rezwan Hasan** both joined Kent's School of Engineering and Digital Arts as new PhD students and also Marie Curie Fellows (Early Stage Researchers) within the PriMa (Privacy Matters) EU project, supervised by **Professor Richard Guest**.

Dr Elke Van Hellemont, Dr Caroline Chatwin, Dr Marian Duggan, Dr Erin Sanders-Mcdonagh, Emma Cooke, Dr Rachel Seoighe, Dr Michael Mills, Dr Phil Carney, Dr Simon Cottee and Dr Marisa Silvestri join KirCCS as Associate Members from the criminology group at the School of Social Policy, Sociology and Social Research (SSPSSR).

Dr Jennifer Storey, Dr Afroditi Pina, Dr Giovanni Travaglino and Dr Caoilte Ó. Ciardha join KirCCS as Associate Members from the School of Psychology.

We now have a new membership category – Honorary Members – to accommodate our retired (emeritus) members, former members keeping an active link with us, visiting and honorary staff associated with the Centre, as well as key external collaborators. **Professor Palash Sarkar** of the Indian Statistical Institute (ISI) and **Professor Martin Parr** of Dstl join KirCCS as new Honorary Members. A number former Core and Associate Members have also become Honorary Members after retirement or leaving Kent.

#### Contact Us

Helen Frampton: Administrative Coordinator

h.frampton@kent.ac.uk, cyber-info@kent.ac.uk

Professor Shujun Li: Director of KirCCS/SoCyETAL

S.J.Li@kent.ac.uk

#### **Events and Talks**

### CyberFirst Girls Competition Empower Cyber Week

**Dr Virginia Franqueira** and PhD student **Sarah Turner** presented two live sessions as part of Cyber First's EmPower Cyber Week (30 November – 4 December, 2020). CyberFirst was set up by the NCSC to develop the UK's next generation of cyber professionals. EmPower Cyber Week involved a series of recorded and live events, specifically aimed at 12-13 year old girls in the UK, providing an exciting opportunity to learn about cyber security. This virtual event included industry talks as well as speakers from the NCSC, Department of Homeland Security and other academics, covering a wide range of topics from coding to cryptography, social engineering to biometrics.

Virginia and Sarah delivered sessions on the security implications of deepfake technologies and how to perform personal threat modelling.

Sarah said, "It was an excellent opportunity to take part in this event, alongside such a range of accomplished speakers. It is always exciting to see the types of initiatives aimed to encourage girls into STEM careers, and a privilege to be a part of one. Cyber security is a broad field with many areas to explore; we are keen to play a role in inspiring the next generation of experts."

More information about the week's agenda can be found <u>here</u>. <u>Sarah's talk</u> can also be viewed on our <u>YouTube</u> <u>Channel</u>.

### BBC Radio 4 interview on Manchester Utd FC cyber attack

**Dr Jason Nurse** was interviewed by BBC Radio 4 about the recent cyber attack on Manchester United Football Club.

It was reported that on Friday 20th November 2020 the club was hit by a sophisticated cyber attack, resulting in staff being locked out of emails and security systems. The NCSC, the government agency that supports businesses in such situations, has been working with United to help resolve the problem.

In the interview, broadcast on Friday 27th November 2020, Dr Nurse comments on the increasing number of ransomware attacks, the probable motivations for cybercriminals and types of data that hackers may try and get access to.

Listen to the recording (starting at 40:25).

**Dr Jason Nurse**, the Centre's Public Engagement Lead, has given several other talks and expert comments since our last issue:

- 19<sup>th</sup> October 2020, Jason gives tips for Cyber Fraud Awareness Week. Read the <u>full article</u>.
- 3<sup>rd</sup> November 2020, "<u>Effective corporate</u> <u>communication after cyber security incidents</u>", CyberSecurity Live Conference.
- 17<sup>th</sup> November 2020, "<u>How to Protect Your</u> <u>Company Brand if a Breach Occurs</u>", SOPHOS Cybersecurity Summit.
- 20<sup>th</sup> November 2020, "Cyber security breach response and comms", University of Bristol Cyber Security Seminar Series.
- 23<sup>rd</sup> November 2020, "<u>Developing a playbook</u> for corporate communications after a data <u>breach</u>", SASIG Security Webinar.
- 3<sup>rd</sup> December 2020, "<u>Putting People First:</u> <u>Overcoming Human Error in Email Security</u>", Infosecurity Magazine Webinar.
- 15<sup>th</sup> December 2020, Jason features alongside other Cyber Security experts in Infosecurity Magazine, <u>with security predictions for 2021</u>.

#### Keynote talk at IWCFTA 2020

**Professor Shujun Li** gave a keynote speech titled "Data Privacy in the Cyber-Physical World: Looking through the Lens of Complex Networks" at IWCFTA 2020 (13th International Workshop on Complex-systems for Future Technologies and Applications), which was held virtually online on 24th October 2020.



# Expert comment on WhatsApp's disappearing message function

**Professor Shujun Li** has welcomed news that WhatsApp plans to introduce a 'disappearing messages' function that will erase chats from the phone of both the sender and recipient after seven days.

Professor Li said:

"This is definitely a good new feature to help improve the privacy-friendliness of WhatsApp. Too many people especially young people are leaving their private information (some highly sensitive) on WhatsApp and other OSN/IM platforms, even on web forums, blogs and discussion groups that are publicly accessible by anyone. A lot of research has shown that such private information can easily end up in the wrong hands.

This feature however does not magically solve all privacy issues. Once private information is shared, it can be reshared and stored by whomsoever sees it, therefore still leading to privacy leakage. Individuals should think twice before sharing private information online, especially on public groups where not everyone can be trusted."

### **Upcoming Seminars**

Security Seminars take place every Friday at 11am during the term. The following seminars have been confirmed and will take place online. These seminars are open to anyone, especially those interested in cyber security, and free to attend. If you would like to attend, please contact <u>J.R.C.Nurse@kent.ac.uk</u>.

Please see our <u>website</u> for more information about our seminars, including any changes.

#### 29 January 2021: 11:00 – 12:00

Title: UShallNotPass: Stopping Cryptographic Ransomware By Controlling CSPRNGs Speaker: Ziya Alper Genç (University of Luxembourg)

#### 12 February 2021: 11:00 – 12:00

Title: Exploring the role of human factors in Information Security; The tale of Cyber Bob Speaker: Lee Hadlington (Nottingham Trent University)

#### 26 February 2021: 11:00 - 12:00

Title: An investigation into the sensitivity of personal information: perceptions, types and evolution

Speaker: Rahime Belen Saglam (University of Kent)

#### 05 March 2021: 11:00 - 12:00

Title: Image Based Sexual Abuse: psychological predictors of perpetration Speaker: Afroditi Pina (University of Kent)

#### 12 March 2021: 11:00 – 12:00

Title: Ethics in Cyber Security: Three approaches and their challenges Speaker: Kevin Macnish (University of Twente)

#### 19 March 2021: 11:00 – 12:00

Title: Lightweight Ciphers for the Internet of Things Speaker: Kalikinkar Mandal (University of New Brunswick)

### **Forthcoming Conferences in 2021**

#### **Calls for Papers / Participation**



### 8th Annual Hot Topics in the Science of Security Symposium (HoTSoS 2021) April 13-15, 2021

HoTSoS is a research event centred on the Science of Security, which aims to address the fundamental problems of security in a principled manner. The eighth annual HoTSoS event will be held virtually and hosted by The National Security Agency. KirCCS member **Dr Özgur Kafali** will act as the Program Co-Chair. Submissions of Works in Progress (WiP) and already published research papers must be made by the deadline of **February 07, 2021.** 

Find out more about this event

### <u>15th International Conference on Web and Social Media (ICWSM</u> <u>2021)</u>

June 7-10, 2021

ICWSM is a forum for researchers from multiple disciplines to come together to share knowledge, discuss ideas, exchange information, and learn about cutting-edge research in diverse fields with the common theme of online social media. KirCCS member **Dr Jason Nurse** will act as the General Chair. The last deadline for full papers has passed but calls for workshop and tutorial proposals are still open (**January 22, 2021**).

Find out more about this event

### <u>17th EAI International Conference on Security and Privacy in</u> <u>Communication Networks (SecureComm 2021)</u> September 6-9, 2021

SecureComm 2021 is calling for high-quality research contributions in **ALL areas of secure communications and networking**, including those addressing interdisciplinary challenges in different application domains. This event will be co-chaired by the KirCCS Director **Shujun Li** and co-organised by several other KirCCS members: **Budi Arief**, **Theodosios Dimitrakos**, **Julio Hernandez-Castro**, **Gareth Howells**, and **Jason Nurse**. It will take place at the University of Kent's Canterbury Campus. Full paper submission deadline: **March 15, 2021**.

Find out more about this event